REMARKS

Claims 1, 2, 3 and 9 have been amended. Claims 1-3 and 6-9 remain for further consideration. No new matter has been added to either the specification or the claims.

The objections and rejections shall be taken up in the order presented in the Official Action.

1. Claims 1-3 and 6-9 currently stand rejected under 37 C.F.R. 1.75(a) for allegedly failing to particularly point out and distinctly claim the subject matter deemed to be the present invention.

Claims 1, 2, 3 and 9 have been amended to correct any possible ambiguity.

In response to the question in the Official Action, in claim 1 the output of the sensor element is the *"sensed signal"*. The output of the sensor signal processing unit is the *"sensor output signal"*. The *"sensed signal"* and the *"sensor output signal"* are different signals.

2-3. Claims 1 and 2 currently stand rejected for allegedly being obvious in view of U.S. Patent 5,150,301 to Kashiwabara (hereinafter "Kashiwabara") in view of the alleged admission regarding the prior art ("APA").

Claim 1 recites a sensor system with variable sensor-signal processing. The sensor system includes a integrated circuit sensor unit that includes:

> "(i) a sensor element that provides a sensed signal in response to a measurement variable, and
>
> (ii) a memory device that stores adjustable coefficient values; and
>
> (iii) a sensor signal processing unit that processes said sensed signal using said adjustable coefficient values to provide a sensor output signal on a output line indicative of the measurement variable,
>
> wherein said integrated circuit sensor unit receives updated adjustable coefficient values via said output line and stores said updated adjustable coefficient values in said memory device." (emphasis added, cl. 1).

The integrated circuit sensor unit of claim 1 includes a sensor element that provides a sensed signal and a sensor signal processing unit that receives the sensed signal and processes it using the adjustable coefficient values stored in the memory device to provide a sensor output signal that is indicative of the measurement variable sensed by the sensor element. That is, the sensor system provides the sensor output signal that is indicative of the measurement variable sensed by the sensor element.

In contrast, Kashiwabara discloses a system for scheduling a fuel injection amount T_i based upon a number of sensed signals, including air flow, coolant temperature, et cetera. (see col. 5, line 32 – col. 6, line 10). The system of Kashiwabara neither discloses nor suggests that one of the sensors disclosed therein includes a sensor element that provides a sensed signal, which is processed within the sensor unit with coefficient values to provide a sensor output signal indicative of the measurement variable. The system of Kashiwabara merely discloses that the sensors provide signals to the controller 10 that are processed in order to schedule a fuel injection amount T_i (see col. 5, lines 38). The fuel injection amount T_i is of course not a signal indicative of sensed parameter (i.e., a measurement variable). In addition, a fair and proper reading of the other prior art references neither discloses nor suggests a sensor that processes its sensed signal as set forth in claim 3.

Accordingly, it is respectfully submitted that assuming for the moment, without admitting, that the prior art references are properly combinable as set forth in the Official Action, the resultant combination is still incapable of rendering obvious the claimed invention.

4. Claim 3 currently stands rejected for allegedly being obvious in view of the combined subject

matter disclosed in Kashiwabara, APA and U.S. Patent 5,006,841 to Vines et al (hereinafter "Vines").

It is respectfully submitted that claim 3 is patentable for at least all the same reasons as claim 1. Claim 3 recites a sensor system with variable sensor-signal processing. The sensor system includes:

> "a integrated circuit sensor unit that receives power via a first line and includes
> (i) a sensor element that provides a sensed signal in response to a measurement variable, and
> (ii) a memory device that stores adjustable coefficient values; and
> (iii) a sensor signal processing unit that processes said sensed signal using said adjustable coefficient values to provide a sensor output signal on a second line indicative of the measurement variable,
> wherein said integrated circuit sensor unit receives updated adjustable coefficient values via said first line and stores said updated adjustable coefficient values in said memory device." (emphasis added, cl. 3).

The Official Action contends *"Kishawabara et al. (Abstract, figure 1, col. 10, lines 16, 17) disclose 'a sensor signal processing unit that processes said sensor signal ... to provide a sensor output signal on a second line'."* (Official Action, pg. 5). It is respectfully submitted that this contention is based upon an improper reading of Kishawabara. Specifically, no sensor (i.e., 2, 22, 28, 30 or 32) in Kishawabara discloses providing a sensed signal that is processed within the integrated circuit sensor unit using coefficient values stored within a memory device, also located within the integrated circuit sensor unit, to provide a sensor output signal that is indicative of the measurement variable. Kishawabara does not disclose such processing within any of the sensor units. A fair and proper reading of Kishawabara reveals that this prior art reference simply discloses scheduling a fuel injection amount T_i in response to a number of sensed signals. (see col. 5, line 32 – col. 6, line 10). In addition, none of the other prior art references discloses nor suggests a sensor that processes its

sensed signal as set forth in claim 3.

Therefore, assuming for the moment without admitting, that the prior art references are properly combinable as set forth in the Official Action, the resultant combination is still incapable of rendering obvious claim 3 since there is no teaching nor suggestion of a sensor that processes its sensed signal as set forth in claim 3.

5. Claims 6-8 currently stand rejected for allegedly being obvious in view of Kashiwabara, APA and U.S. Patent 6,424,143 to Blossfeld (hereinafter "Blossfeld").

It is respectfully submitted that this rejection is moot since independent claim 3 is patentable for at least all the reasons set forth above.

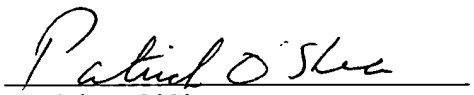
6. Claim 9 currently stands rejected for allegedly being obvious in view of Kashiwabara, APA, Vines and Blossfeld.

It is respectfully submitted that this rejection is moot since independent claim 3 is patentable for at least all the reasons set forth above.

For all the foregoing reasons, reconsideration and allowance of claims 1-3 and 6-9 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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